What is claimed is:

- 1. A method for remediating a material contaminated with a halogenated aromatic compound comprising introducing a culture of *Dehalococcoides ethenogenes* strain 195 into a material contaminated with a halogenated aromatic compound so that said strain removes at least one halogen group from the aromatic compound thereby remediating the material.
- 2. The method of claim 1, wherein the culture 10 comprises a mixed culture.
 - 3. The method of claim 1, wherein the remediation is carried out in situ or ex situ.
- 15 4. The method of claim 1, further comprising adding a simple halogenated compound into the contaminated material.
- 5. A method for enhancing a bioremediation process
 20 of a contaminated material comprising introducing into a contaminated material, wherein said material contains a dehalogenating organism, an effective amount of a simple halogenated compound so that the growth of the organism is stimulated or supported thereby enhancing the bioremediation process of the contaminated material.
 - 6. The method of claim 5, wherein the dehalogenating organism is Dehalococcoides ethenogenes strain 195.
- 30 7. The method of claim 5, further comprising adding an electron donor.

8. A kit for enhancing a bioremediation process of a contaminated material comprising a simple halogenated compound.